



**Figure 1:** Close-up of tip

## Suction diathermy

Dear Sir,

Electrocautery smoke is both mutagenic<sup>[1]</sup> and can carry malignant cells and viable virus particles.<sup>[2]</sup> Suction clearance of the diathermy plume has been recommended using commercially available systems.<sup>[3]</sup> We describe a simple modification of standard theatre equipment that clears diathermy-generated smoke from the surgical field.

A needle point is attached to the standard handheld diathermy. A longitudinal slit is made 10 mm from the end of a piece of standard suction tubing. The diathermy needle is introduced through the tubing to project 6-7 mm from the end of the tube [Figure 1]. The suction tubing is then taped to the handheld diathermy with three steristrips, so the controls are free and allowing good visualization for surgeon and assistant [Figure 2].

Our standard technique for making incisions is to perform a subdermal infiltration with 0.5 or 1% lignocaine containing 1:200,000 adrenaline solution. After waiting for seven minutes to optimize the effect of the adrenaline, a No. 15 blade is used to incise the skin to deep dermal level.

The diathermy is set on coagulation mode and the tip lightly 'brushed' over the stretched tissues. With minimal charring the remaining dermis is divided and the subcutaneous fat is breached. The combination of a continual distraction tension and light brushing with



**Figure 2:** The suction-diathermy



**Figure 3:** The excision bed following the removal of a giant hairy nevus. A tourniquet was not used as Integra™ is going to be used to resurface the defect and it is critical that no haematoma develops

the diathermy needle using the coagulation mode can develop the incision in a bloodless fashion.

Figure 3 shows the excisional defect after removing a hairy naevus without tourniquet. Superficial nerves and veins have been preserved. We claim no novelty in our 'in house' system but commend it on the basis of ease of use, cost and efficacy.

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